



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,491	12/06/2006	Johnson Oyama	P19317-US2	6274
27045	7590	10/28/2008		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER DEAN, JR, JOSEPH E	
			ART UNIT 4154	PAPER NUMBER
			MAIL DATE 10/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,491

Applicant(s)

OYAMA ET AL.

Examiner

JOSEPH DEAN, JR

Art Unit

4154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 16, 19-20, 30, 31-36, 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 16, 19, 20, 30-36 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The following Office Action is in response to the preliminary amendment of August 31, 2006. Status of claims:

Claims 1-9, 11, 16, 19-20, 30, 31-36, 38 are pending.

Claims 10, 12-15, 17-18, 21-29, 37 have been canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, 11, 16, 31, 35 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Channegowda et al. (US20070140181) (hereinafter Channegowda).

Per claim 16, Channegowda discloses an arrangement for access control for a movable network managed by a mobile router (abstract and paragraph 0009), wherein said mobile router is interconnected through a bi-directional link (paragraph 0004, i.e. HSDPA/HSUPA and Fig 2) with a mobility anchoring agent (paragraph 0024, integrated Cellular Access Router via Media Access (Air Interface Controller), i.e. air interface controllers are connected to mobility routers) that anchors the network mobility for the

mobile router, said arrangement comprising: means for exercising access control at the mobility anchoring agent to filter downlink packets(paragraph 0004) to said mobile router (paragraph 0009 and 0025) and means for exercising access control at said mobile router to filter uplink packets (paragraph 0004) to said mobility anchoring agent (paragraph 0009 and 0025).

Per claims 1 and 38, refer to same rationale explained in claim 16.

Per claim 7, Channegowda discloses the method of claim 1, further comprising the step provisioning an access control module (Fig 3, Seamless Connectivity Manager) at said mobility anchoring agent (paragraph 0030) and an access control module (Fig 3, Seamless Connectivity Manager) at said mobile router with provisioning information from an access control source (paragraph 0030, i.e. Seamless Connectivity Manager includes module and source).

Per claim 11, Channegowda discloses the method of claim 7, wherein said access control source is implemented in an AAA client (paragraph 0011), and provisioning information related to a node in said movable network is transferred from an AAA server associated with the home network (paragraph 0023 and 0031 i.e. home network includes core network) of said node to said AAA client and the access control source (paragraph 0030, i.e. Seamless Connectivity Manager).

Per claim 31, Channegowda discloses a mobility anchoring agent for anchoring network mobility for a mobile router that manages a movable network (Abstract and paragraph 0009), wherein said mobility anchoring agent comprises: means for interconnection with said mobile router through a bi-directional link (paragraph 0004);

and means for exercising access control to monitor and filter downlink packets to said mobile router (paragraph 0011, 0027 and 0030).

Per claim 35, Channegowda discloses the mobility anchoring agent of claim 31, further comprising: means for receiving provisioning information for access control (Fig 3, Seamless Connectivity Manager) at both said mobility anchoring agent (paragraph 0030) and said mobile router from an access control source (paragraph 0010); means for forwarding provisioning information for access control at said mobile router to said mobile router (paragraph 0010 and 0030).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Channegowda in view of Leung et al. (US7295, 551) (hereinafter Leung).

Per claim 2, Channegowda discloses the method of claim 1, but does not explicitly site wherein said mobility anchoring agent is a home agent in a home network of said mobile router.

Leung discloses wherein said mobility anchoring agent is a home agent in a home network of said mobile router (col. 1, lines 65-68 and col. 2 lines 1-6, Fig 1, i.e. R2 is the mobility anchoring agent which is a home agent in a home network).

Motivation to combine may be gleaned from the prior art contemplated.

Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and Leung as a whole to produce the invention as claimed with reasonable expectation of achieving and maintaining a home location address.

Per claim 3, Channegowda discloses the method of claim 1, but fails to disclose wherein said mobility anchoring agent is a local forwarding agent in a visited network.

Leung discloses wherein said mobility anchoring agent is a local forwarding agent in a visited network (col. 2 lines 12-19).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and Leung as a whole to produce the invention as claimed with reasonable expectation of achieving conditions of communication and maintaining connectivity.

5. Claims 4,5,19, 20, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Channegowda in view of Lee et al. (US20050058100) (hereinafter Lee)

Per claim 4, Channegowda discloses the method of claim 1, but fails to disclose wherein said mobility anchoring agent runs a NEMO-based (Network Mobility) mobility support protocol with said mobile router.

Lee discloses wherein said mobility anchoring agent(Fig 1, HA120) runs a NEMO-based (Network Mobility) mobility support protocol with said mobile router(paragraph 0033).

Motivation to combine may be gleaned from the prior art contemplated.

Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and Lee as a whole to produce the invention as claimed with reasonable expectation of achieving procedures and processes for moving networks.

Per claims 19 and 32, refer to same rationale explained in claim 4.

Per claim 5, Channegowda discloses the method of claim 4 as applied to claim 1, but fails to disclose wherein said mobile router is interconnected with said mobility anchoring agent through a NEMO bi-directional tunnel, and downlink packets are filtered before said NEMO bi-directional tunnel, and uplink packets are filtered before said NEMO bi-directional tunnel.

Lee discloses wherein said mobile router is interconnected with said mobility anchoring agent through a NEMO bi-directional tunnel, and downlink packets are filtered before said NEMO bi-directional tunnel, and uplink packets are filtered before said NEMO bi-directional tunnel(paragraph 0038 and 0039).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and Lee as a whole to produce the invention as claimed with reasonable expectation of achieving accurate data packets.

Per claims 20 and 33, refer to same rationale explained in claim 5 and 16.

6. Claims 6 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Channegowda in view of O'Neill (US20040100951)

Per claim 6, Channegowda discloses the method of claim 1, but fails to disclose wherein said step of exercising access control at the mobility anchoring agent involves checking headers of IP packets that traverse an access control point in said mobility anchoring agent, and said step of exercising access control at said mobile router involves checking headers of IP packets that traverse an access control point in said mobile router.

O'Neill discloses wherein said step of exercising access control at the mobility anchoring agent involves checking headers of IP packets that traverse an access control point in said mobility anchoring agent (paragraph 0017 and 0018), and said step of exercising access control at said mobile router involves checking headers of IP packets that traverse an access control point in said mobile router (paragraph 0017 and 0018).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and O'Neill as a whole to produce the invention as claimed with reasonable expectation of achieving valid data packets are passed from point A to point B.

Per claim 34, refer to same rationale explained in claim 6.

7. Claims 8, 9 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Channegowda in view of O'Neill (US20040023653).

Per claim 8, Channegowda discloses the method of claim 7, but fails to disclose wherein said provisioning step comprises the steps of: transferring provisioning

information for the access control modules in both said mobility anchoring agent and said mobile router from said access control source to said mobility anchoring agent; and subsequently forwarding provisioning information for the access control module in said mobile router from said mobility anchoring agent to said mobile router over the bi-directional link.

O'Neill discloses wherein said provisioning step comprises the steps of: transferring provisioning information (paragraph 0034 i.e. Dynamic Host Configuration Protocol client, Fig 4-6) for the access control modules in both said mobility anchoring agent (paragraph 0034-0036 and Fig 4-6) and said mobile router (paragraph 0034-0036 and Fig 4-6, i.e. remote mobility agent) from said access control source (paragraph 0034,0035 and Fig 6 i.e. Dynamic Host Configuration Protocol server) to said mobility anchoring agent (paragraph 0034-0036, Fig 4-6 /350); and subsequently forwarding provisioning information(paragraph 0034-0036, Fig 4-6/360) for the access control module in said mobile router (paragraph 0034- 0036 and Fig 4-6, i.e. remote mobility agent) from said mobility anchoring agent (paragraph 0034-0036, Fig 6 /350) to said mobile router over the bi-directional link (paragraph 0027).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of Channegowda and O'Neill as a whole to produce the invention as claimed with reasonable expectation of achieving protocols when transmitting data from different locations.

Per claims 9 and 36, refer to same rationale explained in claim 8 (i.e. bidirectional link includes uplink or downlink).

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEAN, JR whose telephone number is (571)270-7116. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VU Le can be reached on 571-272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH DEAN, JR/
Examiner, Art Unit 4154

/Vu Le/
Supervisory Patent Examiner, Art Unit 4154